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10/645,057	08/21/2003	Marcia L. Stockton	RSW920030109US1	6536
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14TH FLOOR ALBANY, NY			ART UNIT	PAPER NUMBER
			2179	•
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
		STOCKTON, MARCIA L.				
Office Action Summary	10/645,057	Art Unit				
omoo nodon odiniday	Examiner					
The MAII ING DATE of this communication app	TuyetLien (Lien) T. Tran ears on the cover sheet with the o	2179				
Period for Reply	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period was realized to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 66(a). In no event, however, may a reply be tin rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 13 Au	<u>ıgust 2007</u> .					
,—	This action is FINAL. 2b)⊠ This action is non-final.					
•	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	5) Claim(s) is/are allowed.					
6) Claim(s) <u>1-20</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examine	r.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5)	atent Application				

Application/Control Number: 10/645,057 Page 2

Art Unit: 2179

#### **DETAILED ACTION**

1. This action is responsive to the following communication: Amendment filed 8/13/07.

This action is made non-final.

2. Claims 1-20 are pending in the case. Claims 1, 10, 12 and 17 are independent claims.

#### **Continued Examination Under 37 CFR 1.114**

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/13/07 has been entered.

## Claim Objections

4. Applicant's amendment corrects the previous objection; therefore, the previous objection is withdrawn.

### Claim Rejections - 35 USC § 101

- 5. Applicant's amendment corrects the previous rejection; therefore, the previous rejection is withdrawn.
- 6. As mentioned by the Applicant's remark made on the communication dated 03/14/2007 (e.g., see Applicant's remark page 7, second paragraph), the examiner interprets the computer readable medium recited in claim 17 as data storage media and does not include transmission media.

## Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1, 10, 12 and 17 recite the limitation of "defining a <u>plurality of groups</u> of users". However, there is no description in the specification to support the above-mentioned limitation (e.g., note the singular form of "group" is used throughout the Applicant's specification).

Claims 2-9, 11, 13-16, 18-19 are rejected as incorporating the deficiencies of claims upon which it depends.

- 9. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 10. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, it is not clear whether "a group of users" recited in line 3 of the claim is part of the "plurality of groups" as recited in line 2. In addition, the claim fails to show the interrelationship between the element of "defining a plurality of groups of users" with the rest of the elements of the claim.

As to claims 12 and 17, claims 12 and 17 are in the same context as claim 1; therefore they are rejected under similar rationale.

Claim 10 recites the limitation "the group of users" in line 4. There is insufficient antecedent basis for this limitation in the claim. It is not clear whether "the group of users" refers to each group of users or whole group of users or a specific group of users in the plurality of group of users.

Claims 2-9, 11, 13-16, 18-19 are rejected as incorporating the deficiencies of claims upon which it depends.

# Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 12, 14, 16-17, and 19 rejected under 35 U.S.C. 102(a) as being unpatentable over Ohsugi et al. (published article, 'A Recommendation System for Software Function Discovery' APSEC 2002 pages 248-257, hereinafter Ohsugi).

As to claim 12, Ohsugi teaches:

A system for customizing a user interface, the system comprising:

a processor; and

a memory (e.g., system for software users, see page 249 left column and see Fig. 3 on page 251; note that the recommendation system helps improving a user's productivity in using application software, see Abstract), the memory including:

a definition system for defining a group of users (e.g., group of users A-D, see Fig. 2 on page 250);

Art Unit: 2179

a communication system for obtaining a use count for a user interface element for each user in a group of users (e.g., each user's usage history is sent to usage history server, see Fig. 2 on page 250; note usage history A-D are stored at the server and can be used to calculate all user's summarized usage history, see Fig. 2 and Fig. 3 on page 250-251); and

a calculation system for calculating a use weight for the user interface element with respect to another user interface element based on the use counts for the group of users (e.g., calculating all user's summarized usage history, see Fig. 3 on page 251; note that the use weight for the element "Function A" is calculated with respect to other user interface elements such as "Function B").

Ohsugi does not clearly teach that defining a plurality of group of users. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement this limitation because Ohsugi suggests to a skilled artisan that collecting software usage histories can be developed for different groups of users such as software developer and software users (e.g., see page 249, left column). One would have been motivated to implement this limitation to improve usability of the user interface software (e.g., see page 249, left column).

As to claim 17, claim 17 reflects a program product stored on a computer readable medium for customizing a user interface (e.g., see Fig. 2 on page 250 and Fig. 3 on page 251), which when executed performing the steps as recited in claim 12 and is rejected along the same rationale.

As to claims 14 and 19, Ohsugi teaches further comprising a recordation system for recording the use count for each user (e.g., usage history collector, see Fig. 2 in page 250).

Art Unit: 2179

As to claim 16, Ohsugi further teaches wherein the communication system further communicates the use weight to a user device for each user (e.g., recommendation for user A, see Fig. 3 on page 251).

13. Claims 1-11, 13, 15, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohsugi in view of Arcuri et al (Patent No 6121968, hereinafter Arcuri).

As to claim 1, Ohsugi teaches:

A method of customizing a user interface (e.g., system for software users, see page 249 left column and see Fig. 3 on page 251; note that the recommendation system helps improving a user's productivity in using application software, see Abstract), the method comprising:

recording a use count for a user interface element for each user in a group of users (e.g., each user's usage history as shown in Fig. 3 on page 251);

obtaining a use weight for the user interface element with respect to another user interface element based on the use counts for the group of users (e.g., all user's summarized usage history, see Fig. 3 on page 251; note that the use weight for the element "Function A" is calculated with respect to other user interface elements such as "Function B");

Ohsugi does not clearly teach that defining a plurality of group of users. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement this limitation for the same reasons as discussed with respect to claim 12 above.

Ohsugi further teaches recommendation for users a list of useful functions based on use weight (see page 251 right column lines 9-13); however, Ohsugi does not expressly teach modifying the user interface element. Arcuri, though, teaches automatically modifying the user interface element based on control usage (e.g., dynamically changing the available commands

Art Unit: 2179

in a given short menu based upon the particular needs and utilization behavior of a user, see col. 2 lines 10-30).

It would have been obvious to one of ordinary skill in the art having the teachings of Ohsugi and Arcuri before him at the time the invention was made to have combined the two teachings together to automatically modify user interface elements based on use weight in order to present commands to users that are useful without being confusing for the purpose of improving the user's productivity in using application software (see Ohsugi page 248 right column lines 13-20).

### As to claim 10, Ohsugi teaches:

A method of customizing a user interface (e.g., a recommendation system based on a collaborative filtering approach to let users discover useful functions, see page 248 right column lines 13-16), the method comprising:

defining a group of users to include a plurality of users (e.g., group of users A-D, see Fig. 2 on page 250);

associating a server with the group of users (e.g., usage history server, see Fig. 2 on page 250);

obtaining a use count for a user interface element for each user in the group of users at the server (e.g., usage history A-D are stored at the server and can be used to calculate all user's summarized usage history, see Fig. 2 and Fig. 3 on page 250-251);

calculating a use weight for the user interface element with respect to another user interface element based on the use counts for the group of users at the server (e.g., all user's summarized usage history, see Fig. 3 on page 251; note that the use weight for the element "Function A" is calculated with respect to other user interface elements such as "Function B").

Art Unit: 2179

Ohsugi does not clearly teach that defining a plurality of group of users. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement this limitation for the same reasons as discussed with respect to claim 12 above.

Ohsugi further teaches recommendation for users a list of useful functions based on use weight (see page 251 right column lines 9-13); however, Ohsugi does not expressly teach modifying the user interface element. Arcuri, though, teaches automatically modifying the user interface element based on control usage (e.g., dynamically changing the available commands in a given short menu based upon the particular needs and utilization behavior of a user, see col. 2 lines 10-30). Thus, combining Ohsugi and Arcuri would meet the claimed limitation for the same reason as discussed in claim 1.

As to claim 2, Ohsugi and Arcuri teach the limitations of claim 1 for the reasons as discussed with respect to claim 1 above. Ohsugi further teaches defining the group of users to include a plurality of users (e.g., group of users A-D as shown in Fig. 2) and to distinguish the group of users from an another group of users by including only users that use an application having the user interface element for a given job function; (e.g., note the group of users A-D belong to software users distinguished from the group of software developer, see page 249, left column; further note that user's usage history is for a particular application software and that each element is associated with a job function such as Function A-E or Formatting->Font, see page 250 left column and Fig. 3 on page 251); and

associating a server with the group of users (e.g., usage history server, see Fig. 2 on page 250).

As to claim 3, Ohsugi and Arcuri teach the limitations of claim 2 for the reasons as discussed with respect to claim 2 above. Ohsugi further teaches obtaining the use count from

Art Unit: 2179

each user at the server (e.g., usage history A-D are stored at the server and can be used to calculate all user's summarized usage history, see Fig. 2 and Fig. 3 on page 250-251). However, Ohsugi does not expressly teach resetting the use count for each user. Arcuri, though, teaches resetting the use count for each user (e.g., the historical usage record can be deleted if the usage count field is decremented to a prescribed number of usage count, see col. 3 lines 25-30). Thus, combining Ohsugi and Arcuri would meet the claimed limitation for the same reason as discussed in claim 1.

As to claim 4, Ohsugi and Arcuri teach the limitations of claim 2 for the reasons as discussed with respect to claim 2 above. Ohsugi further teaches requesting the use count from each user (e.g., see Fig. 2 on page 250).

As to claim 5, Ohsugi and Arcuri teach the limitations of claim 2 for the reasons as discussed with respect to claim 2 above. Ohsugi further teaches obtaining the use weight from the server at each user (e.g., calculating all user's summarized usage history, see Fig. 3 on page 251).

As to claim 6, Ohsugi and Arcuri teach the limitations of claim 2 for the reasons as discussed with respect to claim 2 above. However, Ohsugi does not expressly teach requesting the use weight from the server during initialization of the application. Arcuri, though, teaches requesting the use weight from the server during initialization of the application (e.g., see step 600 and 610 in Fig. 6). Thus, combining Ohsugi and Arcuri would meet the claimed limitation for the same reason as discussed in claim 1.

As to claim 7, Ohsugi and Arcuri teach the limitations of claim 1 for the reasons as discussed with respect to claim 1 above. Ohsugi further teaches wherein the use weight

Art Unit: 2179

comprises one of: a neutral value, a positive likelihood value, and a negative likelihood value (e.g., all user's summarized usage history of 2 or 8%, 4 or 33%, 1 or 8, see Fig. 3 on page 251).

As to claim 8, Ohsugi and Arcuri teach the limitations of claim 7 for the reasons as discussed with respect to claim 7 above. Ohsugi further teaches wherein the use weight comprises a byte (e.g., numerical number such as 4, 2, 3, and 1 as shown in Fig. 3 on page 251).

As to claims 13 and 18, Ohsugi teaches the limitations of claims 12 and 17 for the reasons as discussed with respect to claims 12 and 17 above. Ohsugi further teaches recommendation for user a list of useful functions based on use weight (see page 251 right column lines 9-13); however, Ohsugi does not expressly teach modifying the user interface element for each user in the group of users based on the use weight. Arcuri, though, teaches modifying the user interface element for each user in the group of users based on control usage (e.g., the short menu may be adapted to the personal needs of the user when the user selects commands from the long menu which are not contained in the short menu, see col. 2 lines 23-30). Thus, combining Ohsugi and Arcuri would meet the claimed limitation for the same reason as discussed in claim 1.

As to claims 9, 15 and 20, Ohsugi and Arcuri teach the limitations of claims 1, 12 and 17 for the reasons as discussed with respect to claims 1, 12 and 17 above. Ohsugi further teaches recommendation for user a list of useful functions based on use weight (see page 251 right column lines 9-13); however, Ohsugi does not expressly teach configuring the user interface element to incorporate use data. Arcuri, though, teaches configuring the user interface element to incorporate use data (e.g., the short menu may be adapted to the personal needs of the user when the user selects commands from the long menu which are not contained in the

short menu, see col. 2 lines 23-30). Thus, combining Ohsugi and Arcuri would meet the claimed limitation for the same reason as discussed in claim 1.

As to claim 11, Ohsugi and Arcuri teach the limitations of claim 10 for the reasons as discussed with respect to claim 10 above. Ohsugi further teaches

recording the use count at a user device for each user (e.g., usage history collector, see Fig. 2 in page 250);

communicating the use count from each user device to the server (e.g. each user's usage history is sent to the usage history server, see Fig. 2 and page 250 left column lines 34-40); and

communicating the use weight from the server to each user device (e.g., sending recommendation to user A, see Fig. 3 on page 251).

# **Response to Arguments**

- 14. Applicant's arguments with respect to claims 1-20 have been considered but are not persuasive.
- ♦ In response to Applicant's argument with respect to claims that the cited prior art of fails to teach a definition system for defining a plurality of groups of users (e.g., see Applicants remark page 7, Paragraph 3 and page 8, Paragraph 3), the examiner notes that this limitation of claims 12 and 17 are clearly addressed as rejected supra.
- In response to Applicant's arguement with respect to claim 2 that the cited prior art fail to teach or suggest defining the group of users to include a plurality of users and to distinguish the group of users from an another group of users by including only users that use an application having the user interface element for a given job function (e.g., see Applicant's remark page 8,

Art Unit: 2179

Para 4 through page 9, Paras 1, 2), the examiner notes that this limitation of claim 2 are clearly addressed as rejected supra.

Applicant further argues that the Office equates the limitation of "job function" with Oshugi's names of clicked menu items or button and that this equating ignores both the different between this element and other elements in the claimed invention and the definition of "job function" found in the specification and that the cited prior art fail to teach or suggest a group of users that user a particular application for a given job function (e.g., see Applicant's remark page 9, Paras 1, 2).

The examiner respectfully disagrees and submits that the examiner states in the previous Office Action dated on 05/11/2007 that user's usage history is for a particular application software and that each element *is associated with* a job function such as Function A-E or Formatting->Font (emphasis added). This rational from the examiner is totally different from the Applicant's conclusion that the Office equates the limitation of "job function" with Oshugi's names of clicked menu items or button and that this equating ignores both the different between this element and other elements in the claimed invention. In addition, the examiner would like to point out that the features upon which applicant relies (i.e., definition of "job function" found in the specification) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, the only place where the term "job function" is defined found in paragraph [0030] (e.g., see 2005/0044508), where it says job function (e.g., purchasing); therefore, the term "job function" can be interpreted as many thing including formatting a document which is found in the prior art of Oshugi.

Art Unit: 2179

#### Conclusion

The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action.

It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33,216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006,1009, 158 USPQ 275,277 (CCPA 1968)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TuyetLien (Lien) T. Tran whose telephone number is 571-270-1033. The examiner can normally be reached on Mon-Friday: 7:30 - 5:00, off on alternating Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/19/2007

Lien Tran Examiner Art Unit 2179

SUPERVISORY PATENT EXAMINER